

Date of Investigation: 10/16/86 County: Dallas
Investigation No: 518830A Portable: No
Type: SIP X
Permit

COMPANY INFORMATION:

Company Name: Consolidated Casting Corporation
Account No.: DB-1563-0
Location: 1501 South I-45
Hutchins, Texas 75141
Mailing Address: Same
Mr. Name: Tom Cumins
Title: Operations Mgr
Phone No: 714-7225-7305
Jurisdiction: Region 3
Account Status: AA
Account Size: B

INVESTIGATION DATA:

Contact Name: Same
Title:
Phone No:

VIOLATIONS:
Rule Number Description

COMPLAINTS:
Log Number

PERMITS:
Permit No. Regional Engr. Austin Engr.

SAMPLES:
Type of Sample Comments

Investigator: Eddie Mack
Approved by: [Signature]
Date: 10/17/86

9490345



October 16, 1986

Dallas County
Consolidated Casting Corporation

- I. TYPE OF OPERATION: Steel investment castings.
- II. FACILITY HISTORY/MANAGEMENT/CONTACTS: Consolidated Casting Corporation is a subsidiary of Rochester Gauges, Inc. This facility was constructed in late 1985 and early 1986 as a replacement for the company's facility at 2425 Caroline Street in Dallas (83-0201-4). Operations began here in July 1986. The Dallas facility shut down in May 1987. Mr. Tom Cumins is Operations Manager and TACB contact. Mr. Phil Bessel was the Safety Administrator but has been replaced by Mr. Sam Sims.
- III. PERMIT SUMMARY: None. The following Standard Exemptions appear to be applicable:
Steel Shot and Aluminum Oxide Blast Cleaning - Exemption 100
Induction Furnaces - Exemption 50
Heat Treating - Exemption 57
- IV. COMPLIANCE SUMMARY: Standard Exemption 50 was confirmed by letter dated 11/8/85 for three electric induction furnaces.
- V. SAMPLING SUMMARY: None by or for the TACB.
- VI. DESCRIPTION OF PROCESSES/THROUGHPUT:
- | | | |
|----------------|---|------------------|
| Raw Materials: | Steel (stainless and alloy) | 75,000 lbs/month |
| | Ground fire brick | 12,000 lbs/month |
| | Fused silica | 6,000 lbs/month |
| | Alumina silicate | 6,000 lbs/month |
| | Ground zircon | 1,500 lbs/month |
| | Wax | 750 lbs/month |
| | Colloidal silica (30% SiO ₂ , 70% water) | 3,125 gal/month |
- The facility produces precision castings, primarily for the petroleum industry. A tooling of the desired item is presented by the customer. Hot wax is injected into the tooling, and the resultant wax patterns are exact duplicates of the casting to be made. The wax patterns are placed onto a pattern tree containing up to several hundred units. The trees are then coated with a series of layers of a colloidal sand and water mixture which is allowed to dry to form a hard shell. The wax is melted out in an autoclave. The molds are heated in one of six gas-fired furnaces equipped with afterburners. Steel is melted in three electric induction furnaces, cast into the molds and allowed to cool. The molds are then broken and the castings are removed from the pattern tree by sawing. The parts are finished by grinding, blast cleaning using three steel shot units and four aluminum oxide units, and heat treating. The blast cleaning units are ducted to a large Wheelabrator baghouse. The grinding operations are hooded and ducted to a second large Wheelabrator baghouse.
- VII. COMMENTS: The facility was in operation and no visible emissions were noted.
- VIII. RECOMMENDATION: Maintain routine surveillance.